

REMARKS

Claims 1, 4, and 6-19 are pending in the application with the present amendments. Claims 2 and 3 are canceled herein in favor of rewritten claims 8 and 9. Claim 5 is canceled herein without prejudice. Claims 1, 4, and 6-9 relate to a method for emulating execution of instructions. Claims 10-14 are newly presented claims to a machine-readable medium having information recorded thereon for performing a method of emulating execution of instructions. Claims 15-19 are newly presented claims to a host system operable to emulate execution of instructions.

Applicant appreciates the early indication of allowability as to claim 4. In the Office Action, the Examiner rejected claims 1-3 and 5-7 under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,103,394 issued April 7, 1992 to Blasciak ("Blasciak"), in view of U.S. Patent No. 5,678,028 issued October 14, 1997 to Bershteyn et al. ("Bershteyn"). For the reasons set forth below, applicant submits that the presently pending claims are patentably distinguished over Blasciak and Bershteyn. Reconsideration and allowance is respectfully requested.

As recited in amended claim 1 herein, a host execution speed at which a host system emulates execution of instructions is dynamically adjusted based on a variance between a first quantity representative of a target execution speed and a second quantity representative of the host execution speed, such that when the host execution speed is less than the target execution speed, the host execution speed is dynamically increased and when the host execution speed is greater than the target execution speed, the host execution speed is dynamically decreased.

As further recited in claim 6, the host execution speed is dynamically increased only when it is slower than the target execution speed by a predetermined acceptable variance, and is dynamically decreased only when it is faster than the target execution speed by a pre-determined acceptable variance.

As further recited in claim 8, the first quantity is a predetermined interval of time for which the target system is calculated to execute a predetermined number of instructions, and the second quantity is an actual amount of time used by the host system to emulate execution of a particular block of instructions containing the predetermined number of instructions.

As further recited in claim 9, the host execution speed is dynamically adjusted for subsequent execution based on the variance determined for a particular block of instructions containing a predetermined number of instructions.

Claims 10-19 include similar recitations.

Applicant respectfully submits that the combination of *Blasciak* and *Bershteyn* neither teaches nor suggests any of the foregoing enumerated features of the presently claimed invention.

Blasciak merely describes a method for measuring the speed of executing instructions by a particular processing system. *Blasciak* neither teaches nor suggests a method by which a speed of emulating execution of instructions is dynamically adjusted based on a variance between a host execution speed on the host system and a target execution speed. *Blasciak* neither teaches nor suggests a method for a host system to emulate execution of instructions, the instructions designed for execution by a target system, in which the host execution speed is dynamically increased when the host execution speed is less than the target execution speed, and is dynamically decreased

when the host execution speed is greater than the target execution speed.

Nor does *Bershteyn* provide the teachings which *Blasciak* lacks regarding the presently claimed invention. *Bershteyn* merely describes various ways of increasing the emulation speed of a hardware-software system designed to emulate the operation of a target system. *Bershteyn* neither teaches nor suggests dynamically adjusting a host execution speed at which the host system emulates execution of instructions such that when the host execution speed is less than the target execution speed, the host execution speed is dynamically increased, and when the host execution speed is greater than the target execution speed, the host execution speed is dynamically decreased. *Bershteyn* neither teaches nor suggests any attempt to control the speed of execution emulation so as to decrease the host execution speed when it exceeds a target execution speed. Nor is there any motivation to do so in *Bershteyn*. *Bershteyn*, being directed to emulating operation of a design for an as yet not implemented hardware system by a combination of existing but slower to operate emulator hardware and software, indicates a need to increase the speed of emulation as much as possible. Accordingly, it is submitted that the combination of *Blasciak* and *Bershteyn* neither teaches nor suggests the invention as recited in the presently pending claims.

Support for the present amendments is provided, *inter alia*, at FIG. 5, and at pg. 9, ln. 19 to pg. 13, ln. 11 of the Specification.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.



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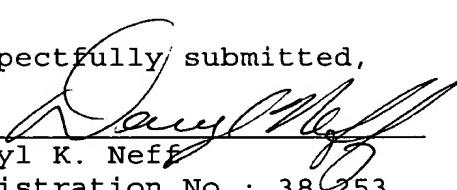
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If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone Applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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